



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,469	02/14/2006	Hirohisa Kusuda	VPM00201	2310
26339	7590	04/08/2008	EXAMINER	
MUIRHEAD AND SATURNELLI, LLC 200 FRIBERG PARKWAY, SUITE 1001 WESTBOROUGH, MA 01581			HUYNH, NAM TRUNG	
			ART UNIT	PAPER NUMBER
			2617	
			MAIL DATE	DELIVERY MODE
			04/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/568,469	Applicant(s) KUSUDA ET AL.	
	Examiner NAM HUYNH	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/14/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-4, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuno et al. (JP 2003273980A) (hereinafter Kuno) in view of Wu et al. (US 6,724,375) (hereinafter Wu).

Regarding claim 1, Kuno teaches an external apparatus for mobile communication terminal comprising:

detection means for detecting at least one of position, direction, attitude and movement of said external apparatus (figure 6, items 30, 32); and

data transmission means for transmitting detection result data acquired based on detection results by said detection means to said mobile communication terminal (figure 6, item 30, the connector).

However, Kuno does not explicitly teach that the detection result data acquired is transmitted by wired or wireless non-public short-range communication. Wu discloses a hand writing input device for a cellular phone (figure 2). In the scope of the invention, the input device, or tablet, is linked to the cellular phone via a wired interface or a wireless interface that may be in IF, RF, or Bluetooth (column 2, lines 55-63). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention to modify the game controller of Kuno, to connect to the phone via a wired link or a short range wireless communication interface, as taught by Wu, in order to expand flexibility in using the controller. A skilled artisan would recognize that by implementing the wired interface, a user may operate the controller away or from a remote position from the mobile phone. Furthermore, a short-range wireless communication interface provides such advantages as battery conservation and the ability to connect or communicate with a wide range of other devices.

Regarding claim 2, Kuno teaches said detection means includes angle detection means for detecting an angle against the standard angle around a virtual axis leading to a predetermined direction (figure 6, item 30, the directional pad is a virtual axis).

Regarding claim 3, Kuno teaches said detection means includes acceleration detection means for detecting acceleration in a predetermined direction working on said external apparatus (figure 6, item 30, when a user pushes the directional pad in a

specific direction there would be acceleration in a predetermined direction working on the external apparatus).

Regarding claim 4, the combination of Kuno and Wu teaches key operation means having keys used by users (Kuno, figure 6, item 30), wherein said data transmission means transmits key operation signals from said key operation means and said detection result data to the mobile communication terminal by non-public communication using flexible communication cable or wireless non-public communication (Wu column 2, lines 55-63). In the combination of the two inventions the signals corresponding to the buttons pressed would be transmitted through a wired or short-range wireless interface.

Regarding claim 7, the combination of Kuno and Wu teaches a mobile communication terminal comprising application program execution means (in Kuno, the means for playing the game on the mobile phone) for executing an application program with detection result data (in Kuno, the game is played with data detected from the controller) acquired based on detection results by detection means for detecting at least one of position, direction, attitude and movement, in a main body of said mobile communication terminal (the game is played with data detected from the controller), said mobile communication terminal being characterized by comprising:

said external apparatus for mobile communication terminal according to claim 1, 2 or 3 (Kuno figure 6, item 30); and

data reception means for receiving detection result data transmitted from said external apparatus for mobile communication terminal by wired or wireless non-public

short-range communication, in the main body of said mobile communication terminal (Wu, column 2, lines 55-63) ; wherein

said application program execution means executes said application program with detection result data received by said data reception means (in Kuno, the game is played using data detected from the controller).

Regarding claim 8, the limitations are rejected as applied to claim 7.

4. Claims 5, 6, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuno et al. (JP 2003273980A) (hereinafter Kuno) in view of Wu et al. (US 6,724,375) (hereinafter Wu) as applied to claim 1 above, and further in view of Moran et al. (US 2004/0157638) (hereinafter Moran).

Regarding claim 5, the combination of Kuno and Wu teaches the limitations set forth in claim 1, but does not explicitly teach that the external apparatus is configured to be freely attached to and removed from a memory card slot provided in said mobile communication terminal. Moran teaches an external host system connected to a cellular telephone via a USB connection with the host system and a flash memory system of the cellular telephone (figure 1, item 110). Therefore it would have been obvious to one of ordinary skill in the art to modify the combination of Kuno and Wu to interface the game controller with the mobile telephone via a memory card slot, as taught by Moran, in order for the processor of the mobile telephone to execute the commands or instructions received from the controller. Moran teaches that the flash

memory system is accessed for reading and/or writing from the host (page 5, paragraph 112).

Regarding claim 6, Moran teaches that the cellular telephone is configured to be completely received in said memory card slot when said external apparatus is attached to the said memory card slot (figure 1).

Regarding claim 9, the combination of Kuno, Wu, and Moran teaches a mobile communication terminal comprising application program execution means (in Kuno, the means for playing the game on the mobile phone) for executing an application program with detection result data (in Kuno, the game is played with data detected from the controller) acquired based on detection results by detection means for detecting at least one of position, direction, attitude and movement, in a main body of said mobile communication terminal (the game is played with data detected from the controller), said mobile communication terminal being characterized by comprising:

said external apparatus for mobile communication terminal according to claim 5 or 6 (Kuno figure 6, item 30); and

a memory card slot that a memory card can be attached to be freely attached to and removed from, in the main body of said mobile communication terminal (Moran figure 1, item 110); and

data reception means for receiving detection result data transmitted from said external apparatus for mobile communication terminal by wired or wireless non-public short-range communication, in the main body of said mobile communication terminal (Wu, column 2, lines 55-63) ; wherein

said application program execution means executes said application program with detection result data received by said data reception means (in Kuno, the game is played using data detected from the controller).

Regarding claim 10, Kuno teaches an external display system for mobile communication terminal comprising said mobile communication terminal according to claim 7, 8, or 9 and an external display device for displaying images based on image signals output from said mobile communication terminal, said external display system for mobile communication terminal being characterized by that said mobile communication terminal is comprised of image output means for outputting image signals for displaying screen images corresponding to contents of said application program executed by said application program execution means to said external display device (figure 6, item 21, the display is configured to display the game for which a user controls with the controller).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sun (US 2003/0153349)

Kido (JP 2003111976A)

Glover (US 2003/0157961)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAM HUYNH whose telephone number is (571)272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

NTH
3/28/08